Unit 02 Digital Devices

True / False

1. Peripheral devices are generally attached to a computer with cables or a wireless connection.
    a. True
    b. False
ANSWER: True
REFERENCES: Computers

2. The CPU of most modern computers is a microprocessor.
    a. True
    b. False
ANSWER: True
REFERENCES: Computers

3. Processing is handled by the computer's central processing unit (CPU).
    a. True
    b. False
ANSWER: True
REFERENCES: Computers

4. The term 'stored program' means that a series of instructions for a computing task can be loaded into a computer's memory.
    a. True
    b. False
ANSWER: True
REFERENCES: Computers

5. The ability to switch between programs makes computers multipurpose devices.
    a. True
    b. False
ANSWER: True
REFERENCES: Computers

6. System software is a set of computer programs that helps a person carry out a task.
    a. True
    b. False
ANSWER: False
REFERENCES: Computers

7. An example of system software is a computer operating system.
    a. True
    b. False
ANSWER: True
REFERENCES: Computers

Unit 02 Digital Devices

8. Semiconductors are substances with properties between those of a conductor and an insulator.
    a. True
    b. False

ANSWER: True
REFERENCES: Circuits and Chips

9. An DIP is a square chip package, typically used for microprocessors, with pins arranged in concentric squares.
    a. True
    b. False

ANSWER: False
REFERENCES: Circuits and Chips

10. LGAs have two rows of pins that connect the chip to a circuit board.
    a. True
    b. False

ANSWER: False
REFERENCES: Circuits and Chips

11. Component systems are currently the most popular form factor for digital devices.
    a. True
    b. False

ANSWER: False
REFERENCES: Components

12. Battery lifespan is the time your device operates before it must be recharged.
    a. True
    b. False

ANSWER: False
REFERENCES: Maintenance

13. Battery life is the time your device operates before it must be recharged.
    a. True
    b. False

ANSWER: True
REFERENCES: Maintenance

14. A desktop is a portable computing device featuring a touch-sensitive screen that can be used for input as well as for output.
    a. True
    b. False

ANSWER: False
REFERENCES: Personal Computers

Unit 02 Digital Devices

15. A slate tablet configuration is basically a screen in a narrow frame that lacks a physical keyboard.
   a. True
   b. False

ANSWER: True
REFERENCES: Personal Computers

16. Smartphones evolved from basic cell phones and PDAs.
   a. True
   b. False

ANSWER: True
REFERENCES: Personal Computers

17. The operating systems for smartphones are radically different to those used for tablet computers.
   a. True
   b. False

ANSWER: False
REFERENCES: Personal Computers

18. Smartwatches are multifunction devices that can include a camera, thermometer, compass, calculator, cell phone, GPS, media player, and fitness tracker.
   a. True
   b. False

ANSWER: True
REFERENCES: Niche Devices

19. Computers with the same operating systems can typically use the same software and peripheral devices.
   a. True
   b. False

ANSWER: True
REFERENCES: Choosing a Digital Device

20. Intel Corporation is the world's largest chipmaker and supplies a sizeable percentage of the microprocessors that power desktops and laptops.
   a. True
   b. False

ANSWER: True
REFERENCES: Microprocessors

21. Modern processors follow Intel's original numbering sequence.
   a. True
   b. False

ANSWER: False
REFERENCES: Microprocessors

Unit 02 Digital Devices

22. The Intel i7 microprocessor is x86 compatible.
    a. True
    b. False
ANSWER: True
REFERENCES: Microprocessors

23. Athlon and A-series processors manufactured by AMD are NOT x86 compatible.
    a. True
    b. False
ANSWER: False
REFERENCES: Microprocessors

24. ARM-based processors are not especially energy efficient.
    a. True
    b. False
ANSWER: False
REFERENCES: Microprocessors

25. x86 processors use a different instruction set than ARM processors.
    a. True
    b. False
ANSWER: True
REFERENCES: How Processors Work

26. The term instruction cycle refers to the process in which a computer executes a single instruction.
    a. True
    b. False
ANSWER: True
REFERENCES: How Processors Work

27. During an instruction cycle, all parts of the instruction are performed by the microprocessor's control unit.
    a. True
    b. False
ANSWER: False
REFERENCES: How Processors Work

28. Most computer ads specify the speed of a microprocessor in gigahertz.
    a. True
    b. False
ANSWER: True
REFERENCES: Performance

Unit 02 Digital Devices

29. A multicore processor that executes more than one instruction at a time is referred to as a parallel processor.
    a. True
    b. False
ANSWER: True
REFERENCES: Performance

30. RAM is volatile.
    a. True
    b. False
ANSWER: True
REFERENCES: Random Access Memory

31. ROM is temporary and volatile, RAM is more permanent and non-volatile.
    a. True
    b. False
ANSWER: False
REFERENCES: Read-Only Memory

32. A hard disk drive is an example of magnetic storage.
    a. True
    b. False
ANSWER: True
REFERENCES: Magnetic Storage Technology

33. Solid state storage stores data in erasable, rewritable circuitry, rather than on spinning disks or streaming tape.
    a. True
    b. False
ANSWER: True
REFERENCES: Solid State Storage Technology

34. Memory cards are typically volatile.
    a. True
    b. False
ANSWER: False
REFERENCES: Solid State Storage Technology

35. A solid state drive can be used as a substitute for a hard disk drive.
    a. True
    b. False
ANSWER: True
REFERENCES: Solid State Storage Technology

Unit 02 Digital Devices

36. All remote storage is considered to be cloud storage.
    a. True
    b. False
ANSWER: False
REFERENCES: Cloud Storage

37. When a peripheral device is connected or disconnected while the host device is operating, it is called hot-plugging.
    a. True
    b. False
ANSWER: True
REFERENCES: Expansion Ports

38. In a display device, response rate is the time it takes for one pixel to change from black to white then back to black.
    a. True
    b. False
ANSWER: True
REFERENCES: Display Devices

39. A laser printer has a nozzle-like print head that sprays ink onto paper to form characters and graphics.
    a. True
    b. False
ANSWER: False
REFERENCES: Printers

Multiple Choice

40. Which of the following is based on computer technology?
    a. tablets
    b. ebook readers
    c. game consoles
    d. all of the above
ANSWER: d
REFERENCES: Computers

41. _____ is data that is entered into a computer. _____ is the result produced by a computer.
    a. Output, Input
    b. Input, Output
    c. Information, Binary data
    d. None of the above
ANSWER: b
REFERENCES: Computers

Unit 02 Digital Devices

42. Most computers have temporary holding areas called _____.
    a. output
    b. microprocessor
    c. CPU
    d. memory
ANSWER: d
REFERENCES: Computers

43. The primary purpose of _____ software is to help the computer system monitor itself in order to function efficiently.
    a. system
    b. application
    c. input
    d. memory
ANSWER: a
REFERENCES: Computers

44. The electronic components of most digital devices are mounted on a circuit board called a _____.
    a. system board
    b. motherboard
    c. main board
    d. all of the above
ANSWER: d
REFERENCES: Circuits and Chips

45. The term _____ refers to the part of a digital device that holds the system board.
    a. form factor
    b. CPU
    c. system board
    d. system unit
ANSWER: d
REFERENCES: Components

46. The most popular battery type used in today's electronic devices is _____.
    a. nickel-cadmium
    b. alkaline
    c. lithium ion
    d. none of the above
ANSWER: c
REFERENCES: Maintenance

Unit 02 Digital Devices

47. At its time of construction, one of the fastest computers in the world is referred to as a(n) _____.
    a. mainframe
    b. supercomputer
    c. minicomputer
    d. all of the above
ANSWER: b
REFERENCES: Enterprise Computers

48. Originally called microcomputers, _____ are designed to meet the computing needs of individuals.
    a. mainframes
    b. personal computers
    c. microcomputers
    d. servers
ANSWER: b
REFERENCES: Personal Computers

49. Which of the following is an example of a computer that is a small, lightweight personal computer that is designed like a clam shell?
    a. Desktop computer
    b. Laptop computer
    c. Server
    d. Tablet
ANSWER: b
REFERENCES: Personal Computers

50. Which of the following is an example of an operating system that is used by smartphones?
    a. iOS
    b. Android
    c. Windows RT
    d. All of the above
ANSWER: d
REFERENCES: Personal Computers

51. Modern refrigerators, washing machines, and other appliances are controlled by integrated circuits called _____ that combine sensors with processing circuitry.
    a. microcontrollers
    b. microcomputers
    c. servers
    d. microdevices
ANSWER: a
REFERENCES: Niche Devices

Unit 02 Digital Devices

52. What type of computer should you consider purchasing if you want a system that is ideal for dedicated gamers, serious designers, desktop publishers, and video editors?

    a. Laptop

    b. Desktop

    c. Tablet

    d. Smartphone

ANSWER: b

REFERENCES: Choosing a Digital Device

53. What type of computer should you consider purchasing if you want a portable system that is great for consuming content
such as ebooks, music, and videos but not so great for creating content or multitasking?

    a. Tablet

    b. Smartphone

    c. Desktop

    d. Laptop

ANSWER: a

REFERENCES: Choosing a Digital Device

54. What type of computer should you consider purchasing if you want a portable system that is good for students and on-the-go professionals who want to create content and be productive, in addition to consuming content?

    a. Desktop

    b. Laptop

    c. Tablet

    d. Smartphone

ANSWER: b

REFERENCES: Choosing a Digital Device

55. A(n) _____ contains a collection of instructions for actions that the circuitry in a microprocessor can perform.

    a. ALU

    b. ARM

    c. microprocessor

    d. instruction set

ANSWER: d

REFERENCES: How Processors Work

Unit 02 Digital Devices

56. Microprocessors can't directly understand programming languages, so programs have to be converted into _____ that corresponds to the microprocessor's instruction set.
    a. applications
    b. machine language
    c. microprocessors
    d. ARM
ANSWER: b
REFERENCES: How Processors Work

57. In a microprocessor, the _____ fetches instructions.
    a. ALU
    b. register
    c. CPU
    d. control unit
ANSWER: d
REFERENCES: How Processors Work

58. Processors that execute one instruction at a time are considered to be _____ processors
    a. serial
    b. parallel
    c. pipeline
    d. none of the above
ANSWER: a
REFERENCES: Performance

59. _____ is a temporary holding area for data and programs.
    a. CISC
    b. RAM
    c. ROM
    d. RISC
ANSWER: b
REFERENCES: Random Access Memory

60. Which of the following is an important consideration when evaluating storage options for digital devices?
    a. Durability
    b. Dependability
    c. Capacity
    d. All of the above
ANSWER: d
REFERENCES: Storage Basics

Unit 02 Digital Devices

61. Which of the following is an example of why hard disk drives are so popular?
    a. They are not susceptible to a head crash
    b. Relatively low cost for lots of storage
    c. they are volatile
    d. All of the above
ANSWER: b
REFERENCES: Magnetic Storage Technology

62. _____ is the amount of data a storage device can move per second from the storage medium to RAM.
    a. Access time
    b. Data transfer rate
    c. Bitrate
    d. RPM
ANSWER: b
REFERENCES: Magnetic Storage Technology

63. Which optical storage technology stores data permanently on a disc, which cannot be subsequently added to or changed.
    a. Read-only
    b. Recordable
    c. Rewritable
    d. None of the above
ANSWER: a
REFERENCES: Optical Storage Technology

64. Which of the following is NOT drawback of using cloud storage?
    a. Increased security risk.
    b. High price of storage.
    c. Possible service outage.
    d. Discontinuation of service.
ANSWER: b
REFERENCES: Cloud Storage

65. The main circuits on the system board that carry data are called the _____.
    a. ROM
    b. RAM
    c. expansion bus
    d. data bus
ANSWER: d
REFERENCES: Expansion Ports

Unit 02 Digital Devices

66. The part of the data bus that runs between the microprocessor and RAM is called the _____ bus.
    a. local
    b. expansion
    c. USB
    d. network
ANSWER: a
REFERENCES: Expansion Ports

67. Which of the following is NOT an example of an expansion port?
    a. Thunderbolt
    b. USB 3.0
    c. HDMI
    d. RAM
ANSWER: d
REFERENCES: Expansion Ports

68. A(n) _____ is software that helps a peripheral device establish communication with its host device.
    a. device hub
    b. device driver
    c. hot-plug
    d. data bus
ANSWER: b
REFERENCES: Device Drivers and Apps

69. The advantages of LCD screens include display clarity, low radiation emission, portability, and compactness.
    a. display clarity
    b. low radiation emission
    c. portability
    d. all of the above
ANSWER: d
REFERENCES: Display Devices

Completion

70. A(n) _____ is a multipurpose device that accepts input, processes data, stores data, and produces output, all according to a series of stored instructions.
ANSWER: computer
REFERENCES: Computers

71. Keyboards and printers are two examples of _____ devices.
ANSWER: peripheral
REFERENCES: Computers

Unit 02 Digital Devices

72. Computers process _____ by performing calculations, modifying documents and pictures, drawing graphs, and sorting lists of words or numbers.
ANSWER: data
REFERENCES: Computers

73. Instructions that tell a computer how to carry out processing tasks are referred to as a computer _____.
ANSWER: program, application
REFERENCES: Computers

74. The collection of programs on a computer is referred to as _____.
ANSWER: software
REFERENCES: Computers

75. Computers run three main types of software: application software, development tools, and _____ software.
ANSWER: system
REFERENCES: Computers

76. Software applications are sometimes referred to as _____, especially in the context of handheld devices.
ANSWER: apps, app
REFERENCES: Computers

77. An integrated circuit is a set of microscopic electronic circuits etched onto a thin slice of _____ material such as silicon.
ANSWER: semiconducting, semiconductor
REFERENCES: Circuits and Chips

78. The _____ houses all essential chips and provides connecting circuitry between them.
ANSWER: system board, motherboard, main board
REFERENCES: Circuits and Chips

79. In the computer industry, the term _____ refers to the size and dimensions of a device or components.
ANSWER: form factor
REFERENCES: Components

80. _____ devices have a keyboard as the base and a screen on the hinged cover.
ANSWER: Clamshell, notebook, laptop
REFERENCES: Components

81. The _____ form factor features a touchscreen that covers most of the device's surface.
ANSWER: slate, tablet
REFERENCES: Components

82. Many touchscreens have an _____ coating designed to repel the oils deposited by fingertips.
ANSWER: oleophobic
REFERENCES: Maintenance

Unit 02 Digital Devices

83. A large, closet-sized computer capable of simultaneously processing data for hundreds or thousands of users is most likely a _____ computer.
ANSWER: mainframe
REFERENCES: Enterprise Computers

84. A computer that is primarily used to serve data to other computers on a network is called a(n) _____.
ANSWER: server
REFERENCES: Enterprise Computers

85. A _____ is a special category of laptop, designed to be connected to the Internet for most routine computing activities.
ANSWER: Chromebook
REFERENCES: Personal Computers

86. _____ are mobile devices that have features similar to tablet computers, but also provide telecommunications capabilities over cell phone networks.
ANSWER: Smartphones, Smartphone
REFERENCES: Personal Computers

87. Smartwatches, smartglasses, and fitness trackers can be classified as _____ computers.
ANSWER: wearable
REFERENCES: Niche Devices

88. Digital devices such as NOOK and the Kindle, that are designed for displaying the content of digital publications, such as books, magazines, and newspapers are referred to as _____.
ANSWER: ebook readers
REFERENCES: Niche Devices

89. Head-mounted digital devices designed to look like eyeglasses are called _____.
ANSWER: smartglasses
REFERENCES: Niche Devices

90. To monitor activity throughout the day, you can wear a _____. These devices, worn on the wrist or clipped to a pocket, monitor your steps and heart rate.
ANSWER: fitness tracker
REFERENCES: Niche Devices

91. Computers that operate in essentially the same way and use the same software are said to be _____.
ANSWER: compatible
REFERENCES: Choosing a Digital Device

92. A(n) _____ is an integrated circuit designed to process instructions.
ANSWER: microprocessor
REFERENCES: Microprocessors

Name:_____ Class:_____ Date:_____

Unit 02 Digital Devices

93. In 1971, Intel introduced the world's first microprocessor called the _____.
ANSWER: 4004
REFERENCES: Microprocessors

94. The _____ chip family set the standard for processors used in today's desktop and laptop computers, as well as servers.
ANSWER: 8086, x86.
REFERENCES: Microprocessors

95. The processors that are found in just about all desktop and laptop computers are _____ compatible.
ANSWER: x86
REFERENCES: Microprocessors

96. Processors based on ____ technology dominate tablet computers and smartphones.
ANSWER: ARM
REFERENCES: Microprocessors

97. ____ processors are found in Microsoft's Surface tablets, Apple's iPads and iPhones, and Samsung's lineup of Galaxy phones.
ANSWER: ARM
REFERENCES: Microprocessors

98. Microprocessors are hard-wired to perform a limited, preprogrammed set of activities called a(n) _____.
ANSWER: instruction set
REFERENCES: How Processors Work

99. The _____ is the part of the microprocessor that performs arithmetic operations, such as addition and subtraction.
ANSWER: ALU, arithmetic logic unit
REFERENCES: How Processors Work

100. The ALU uses _____ to hold data that is being processed.
ANSWER: registers
REFERENCES: How Processors Work

101. When a program begins, the memory address of the first instruction is placed in a part of the microprocessor's control unit called a(n) _____.
ANSWER: instruction pointer
REFERENCES: How Processors Work

102. In a processor, the timing device that sets the pace for executing instructions is called the _____.
ANSWER: microprocessor clock
REFERENCES: Performance

Name: _____ Class: _____ Date: _____

Unit 02 Digital Devices

103. A microprocessor that contains circuitry for more than one processing unit is called a _____ processor.
ANSWER: multicore, multi-core, multi core
REFERENCES: Performance

104. A(n) _____ is special high-speed memory that allows a microprocessor to access data more rapidly than from memory located elsewhere on the system board.
ANSWER: CPU cache, cache
REFERENCES: Performance

105. If a program exceeds its allocated space, the operating system uses an area of the hard disk or other storage device as _____ memory.
ANSWER: virtual
REFERENCES: Random Access Memory

106. _____ is the term used for the components of a digital device designed to hold data permanently.
ANSWER: Storage, Permanent storage
REFERENCES: Storage Basics

107. _____ storage represents data as microscopic light and dark spots on a disc surface.
ANSWER: Optical
REFERENCES: Optical Storage Technology

108. Remote storage that is available as an Internet service is called _____ storage.
ANSWER: cloud
REFERENCES: Cloud Storage

109. A(n) _____ is a copy of one or more files that is made in case the originals become damaged.
ANSWER: backup, data backup
REFERENCES: Backup

110. A(n) _____ contains parts of the operating system necessary to boot your computer and diagnose system problems after a hard drive failure or software malfunction.
ANSWER: recovery drive, system repair disc
REFERENCES: Backup

111. A(n) _____is a bit-for-bit copy of the data from all sectors of a hard disk.
ANSWER: disk image
REFERENCES: Backup

112. The term _____ device is used for devices such as printers, display devices, storage devices, mice, and headsets that are connected to the system unit of a computer.
ANSWER: peripheral
REFERENCES: Add-On Gadgets

Unit 02 Digital Devices

113. Ports that expand the options for input, output, and storage, they are commonly called _____ ports.
ANSWER: expansion
REFERENCES: Expansion Ports

114. A USB _____ is an inexpensive device that turns one USB port into multiple ports.
ANSWER: hub
REFERENCES: Expansion Ports

115. A common wireless technology for connecting peripherals is _____.
ANSWER: Bluetooth
REFERENCES: Bluetooth

116. In a display device, _____ is the distance in millimeters between like-colored LEDs.
ANSWER: dot pitch, dp
REFERENCES: Display Devices

117. The number of horizontal and vertical pixels that a device displays on the screen is referred to as screen _____.
ANSWER: resolution
REFERENCES: Display Devices

118. A graphics card contains a(n)_____ and special video memory, which stores screen images as they are processed but before they are displayed.
ANSWER: graphics processing unit , GPU
REFERENCES: Display Devices

119. A(n) _____ printer has a nozzle-like print head that sprays ink onto paper to form characters and graphics.
ANSWER: ink jet, ink-jet, inkjet
REFERENCES: Printers